

1968

NARRATIVE REPORT
BENSON WETLAND MANAGEMENT DISTRICT
BENSON, MINNESOTA
CALENDAR YEAR 1968

PERMANENT PERSONNEL

James J. Hubert, Project Leader (GS-11)	1/1/68 - 12/31/68
Jack C. Womble, Assistant Wetland Manager (GS-9)	1/1/68 - 12/31/68
Betty L. Dahl, Clerk (GS-3) (Part Time)	1/1/68 - 3/22/68
Evonne T. Mikkelsen (GS-3) (Part Time)	5/19/68 - 12/31/68
Richard W. Motsko, Maintenanceman (WB-5)	1/1/68 - 12/31/68
Roger H. Nelson, Maintenanceman (WB-5)	1/1/68 - 12/31/68

TEMPORARY PERSONNEL

Evonne T. Mikkelsen (GS-2) (Part Time) *	3/18/68 - 5/18/68
David L. Haukos, Laborer	8/5/68 - 12/1/68
Daniel J. Orr, Laborer	6/3/68 - 8/31/68
Earl W. Orr, Biological Technician (Wildlife)(GS-5)	7/15/68 - 9/30/68
John E. Schliep, Laborer	5/20/68 - 12/1/68

*Reclassified, Career-conditional appointment 5/19/68

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ANNUAL NARRATIVE REPORT
BENSON WETLAND MANAGEMENT DISTRICT
JANUARY - DECEMBER, 1968

I. GENERAL

A. Description of the Area

Established in October 1964, the Benson Wetland Management Office located in Benson, Minnesota serves an area of eleven counties of West-central and South-central Minnesota. Included in the District are the counties of Big Stone, Cottonwood, Jackson, Kandiyohi, Lac qui Parle, Pope, Stearns, Stevens, Swift, Traverse and Yellow Medicine. The map which follows reflects the extent and location of the Wetland District in relation to the State.

The area lies on the eastern margin of both the Great Plains and the prairie pothole region of the midwest. The topography varies greatly from rolling grassland and forest to flat agricultural-type land. The transition zone between plains and forests is locally evident.

B. Status of the Acquisition Program

1. Fee Title Program

Passage of the Wetlands Program Extension Bill on December 16, 1967 has met with National as well as local acceptance. The bill, S.1078 extends provisions of the Wetland Loan Act for an additional eight years. The Benson Wetland Office, formerly the Benson Area Acquisition Office, anticipates reaching their acreage goals by June 31, 1976. This marks the end of the extended period.

The original acreage goal was revised during 1968. There were 7,000 goal acres shifted to the Fergus Falls Wetland District while 3,000 acres within the Benson District were shifted into the primary counties. The revised acreage goal is now set at 52,037 acres.

Table I, "Fee Title Acquisition Status", reflects trends of the fee title program from 1966 through 1968. A correlation of acquisition can easily be made between these three years. The option date of the purchase agreement was used as the breaking-point for preparing Table I.

BENSON WETLAND MANAGEMENT DISTRICT

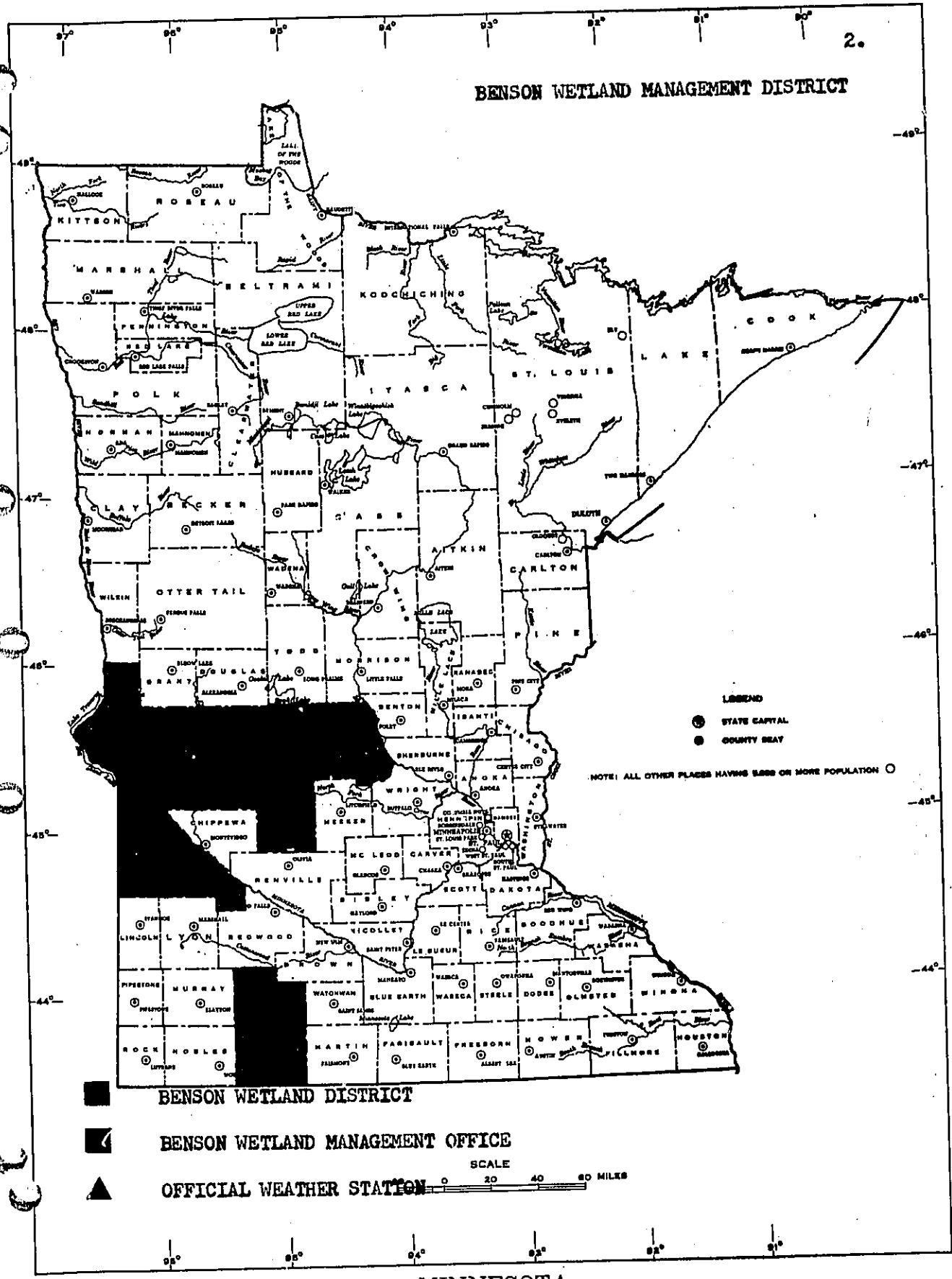


TABLE I FEE TITLE ACQUISITION STATUS

County	1966		1967		1968	
	:No.Mgt.:		:No.Mgt.:		:No.Mgt.:	
	:Units :	Acres	:Units :	Acres	:Units :	Acres
Big Stone	: 37 :	5,418.47	: 46 :	6,600.15	: 53 :	6,677.15
Cottonwood	: 3 :	295.45	: 5 :	638.45	: 6 :	798.45
Jackson	: 8 :	947.57	: 10 :	1,352.17	: 10 :	1,352.17
Kandiyohi	: 28 :	4,879.96	: 33 :	5,223.86	: 38* :	5,823.37
Lac qui Parle	: 8 :	790.30	: 9 :	1,231.23	: 12 :	1,371.23
Pope	: 30 :	4,554.58	: 35 :	5,672.42	: 42 :	6,091.87
Stearns	: 7 :	1,582.09	: 12 :	1,966.69	: 13 :	2,044.69
Stevens	: 28 :	3,275.33	: 29 :	3,599.33	: 37 :	4,091.03
Swift	: 18 :	2,933.53	: 17 :	3,020.80	: 21* :	4,338.06
Traverse	: 7 :	1,589.62	: 7 :	1,669.62	: 7 :	1,669.62
Yellow Medicine	: 1 :	30.00	: 2 :	70.00	: 2 :	70.00
TOTALS	: 175 :	26,296.90	: 205 :	31,044.72	: 241 :	34,327.64

* A portion of this increase reflects the splitting of 2 units in Kandiyohi and Swift Counties. Although joined, these units are transected by roads and do not have any wetlands in common.

A decrease in the number of individual tracts and total acres acquired in 1968 was noted. However, the number of new management units created in 1968 increased slightly over new units established in 1967. The 1968 decrease in tracts and acres acquired can be partially contributed to a loss of acquisition office personnel. Also the directing of acquisition activity in South Dakota was involved. Indicative of this decline is the fact that 395 acres per month were acquired in 1967 while 274 acres per month were acquired in 1968. A total of 73 individual tracts were acquired in 1967 while only 48 tracts were acquired in 1968. During the next two years there should be a leveling off or decrease in the establishment of new units. Although 33 of the 48 tracts acquired in 1968 involved new units, it is evident that more time will be required for roundouts in the future.

During 1968, the Benson Wetland Office took over acquisition in three South Dakota Counties. Emphasis will be on the fee title program. This has made the Benson office an interstate office. Wetlands acquired in South Dakota will come under the management jurisdiction of Waubay National Wildlife Refuge.

2. Easement Program

TABLE II		EASEMENT ACQUISITION STATUS					
County	1966		1967		1968		
	: Total		: Total		: Wetland		Total
	:No. :	Acres	: No. :	Acres	: No.:	Acres	: Acres
Big Stone	: 95 :	13,233.43	: 99 :	13,773.43	: 108 :	4,292.00	: 15,572.63
Cottonwood	: No easements being taken						
Jackson	: No easements being taken						
Kandiyohi	: 48 :	6,521.13	: 82 :	9,507.62	: 85 :	3,007.00	: 10,145.27
L.Q.P.	: 2 :	240.00	: 2 :	240.00	: 2 :	141.00	: 240.00
Pope	: 98 :	17,870.82	: 116 :	19,290.98	: 118 :	5,308.00	: 20,118.13
Stearns	: 4 :	876.32	: 5 :	876.32	: 5 :	257.00	: 876.32
Stevens	: 9 :	756.25	: 10 :	890.99	: 15 :	426.00	: 1,392.64
Swift	: 8 :	1,091.52	: 11 :	1,271.52	: 13 :	384.00	: 1,311.52
Traverse	: 18 :	2,961.38	: 19 :	3,021.38	: 21 :	995.00	: 3,101.04
Yellow Med:	- :	-	- :	-	: 1 :	17.00	: 80.00
TOTALS	: 282 :	43,550.85	: 344 :	48,872.24	: 368 :	14,827.00	: 52,837.55

Trends of the easement program are reflected above by Table II, "Easement Acquisition Status". This table correlates progress of the program from 1966 through 1968.

In 1967, it was anticipated that the easement program would steadily increase. However, the 1968 trend was the reverse. Only 24 new easements were secured as compared to 62 in 1967. Benson Wetland Office personnel state that the easement program appears to be dying out. The ebb in the program is contributed to lack of public acceptance and emphasis on draining.

C. Weather Conditions

Wanting moisture conditions persisted into 1968 and throughout the remaining winter months. Very little precipitation in the form of snow was received. Above normal temperatures during the 3rd week of January and on into February coupled with unusually warm temperatures in March continued to melt the limited snow and ice cover. All evidence of snow was gone by March 17th.

TABLE III 1968 WEATHER DATA

Precipitation

Month	: Willmar	: Morris	: Benson	: Canby	: Windom	: Average
January	: .85"	: .70"	: 1.07"	: .53"	: .49"	: .73"
February	: .13	: .11	: .10	: .10	: .06	: .10
March	: .61	: .48	: 1.86	: 1.02	: .38	: .87
April	: 5.90	: 4.88	: 4.65	: 5.65	: 4.19	: 5.05
May	: 1.58	: 2.22	: 1.44	: 1.74	: 1.61	: 1.72
June	: 8.81	: 3.51	: 4.45	: 4.38	: 4.88	: 5.21
July	: 5.17	: 1.06	: 3.60	: 4.82	: 8.48	: 4.63
August	: 1.45	: 2.96	: 2.55	: 2.86	: 2.68	: 2.50
September	: 5.32	: 3.46	: 3.33	: 3.28	: 7.53	: 4.58
October	: 7.10	: 4.12	: 4.88	: 5.06	: 5.76	: 5.38
November	: .67	: .70	: .83	: .98	: .53	: .74
December	: 2.66	: 3.48	: 2.91	: 4.04	: 2.15	: 3.05

ANNUAL TOTAL 40.25" : 27.68" : 31.67" : 34.46" : 38.74" : 34.56"

ANNUAL NORM 24.47" : 22.58" : * : * : * : *

*Normals have not yet been established.

Temperature

Month	: Willmar	: Morris	: Benson	: Canby	: Windom
	: Max : Min	: Max : Min	: Max : Min	: Max : Min	: Max : Min
January	: 45 : -25	: 45 : -27	: 47 : -25	: 49 : -22	: 46 : -20
February	: 38 : -15	: 34 : -16	: 39 : -15	: 41 : -12	: 46 : -13
March	: 79 : 5	: 76 : 3	: 78 : 5	: 81 : 4	: 84 : 6
April	: 85 : 19	: 83 : 14	: 88 : 15	: 90 : 17	: 88 : 17
May	: 82 : 31	: 86 : 29	: 83 : 26	: 86 : 30	: 87 : 27
June	: 95 : 42	: 96 : 38	: 97 : 40	: 100 : 38	: 98 : 40
July	: 94 : 48	: 94 : 46	: 95 : 47	: 95 : 49	: 95 : 49
August	: 93 : 44	: 96 : 40	: 96 : 44	: 97 : 44	: 96 : 45
September	: 85 : 38	: 85 : 36	: 85 : 36	: 86 : 36	: 84 : 37
October	: 82 : 26	: 79 : 24	: 81 : 24	: 81 : 24	: 82 : 25
November	: 57 : 12	: 60 : 14	: 57 : 14	: 58 : 10	: 67 : 11
December	: 39 : -24	: 45 : -26	: 39 : -26	: 48 : -23	: 44 : -22

EXTREMES : 95 : -25 : 96 : -27 : 97 : -26 : 100 : -23 : 98 : -22

Last Killing Frost of Spring - 5/6/68
First Killing Frost of Fall - 10/4/68

A blizzard evolved in the Cottonwood-Jackson Counties area on February 28th, however very little precipitation was received. On March 17th, the entire district was plagued by an eight hour dust storm. The very next day heavy rain, marble size hail and tornado warnings occurred in parts of the district.

Spring marked the onset of above normal precipitation which occurred during sporadic thundershowers in April, May and June. The last measurable snowfall (approx. 4") on April 3rd was preceded by a thundershower with one inch of rain. The Cottonwood-Jackson County area recorded 80 - 100 mph. winds with driving rain on June 21st. Temperatures remained slightly below normal during May and the 3rd week of June. High winds persisted through most of the spring season.

Above normal precipitation occurred during July, while near normal amounts were received in August. Severe thundershower activity on July 18th was accompanied by hail, high winds and a tornado watch. Tornado warnings were a common occurrence over the district throughout the summer season. A tornado touched down and moved across the Stern WPA in Jackson County on August 10th, however only slight sign and tree damage was reported. Temperatures over the district were quite variable throughout the season. Unseasonably cool weather prevailed during August, except for hot humid conditions during the 3rd week.

Above normal amounts of precipitation continued through the fall season with prolonged periods of rain received during October. Moisture resembling that of spring was present. Farmers began screaming as excessive moisture affected their fall harvest schedules. Near seasonal temperatures lingered through the season with the first killing frost occurring on October 4th.

Varying temperatures and precipitation prevailed over the district during November and December. Snow blanketed the area on November 16th. A warming trend during the third week of November was followed by dropping temperatures. Complete freeze-up of the larger lakes occurred by the end of November. Blizzard conditions prevailed on December 13th and 22nd. These blizzards paralyzed the district with drifting snow and dropping temperatures. In the district, the year ended with temperatures dropping as low as minus 28 degrees and snow in excess of 26.5

inches on the ground. This was indeed a real deviation from the 1967 weather. In 1967 the year ended with seasonably mild temperatures and little snow cover.

D. History of Past Use

The region is primarily agricultural with corn and beans as prevailing crops. Nearly all land regardless of capability has been tilled at one time. All types of erosion are evident as a result.

The terrific demand for farmland in the 1940's and 1950's caused many thousands of wetlands to be destroyed in the name of conservation. Greater emphasis on true conservation in recent years has resulted in at least a beginning to better land use.

The wetland management units are beginning to contribute to the area economy. Although the degree of economic relation may be small, the grazing units and small farmland tracts will aid the surrounding communities.

E. Habitat Conditions

1. Water

The 1968 water conditions were in reverse of those occurring in 1967. The year started in the midst of a drought which extended into late summer. Then water levels gradually started improving with above normal amounts of precipitation received. By the close of 1968 moisture was in good supply.

Winter ended with below normal snow pack. Therefore, the spring thaw had little to offer in the form of moisture. Also, increased evaporation occurred from high persistent winds throughout most of the spring. Excessive moisture was received in April, however little runoff resulted due to the extremely dry ground. Most wetlands dry in the fall of 1967 remained dry throughout the spring of 1968. All wetlands on 10 of 12 WPAs located in Cottonwood and Jackson Counties remained dry until summer.

Moisture conditions became extremely variable between June and September. During this period Cottonwood, Jackson, Kandiyohi and Stearns Counties received above normal precipitation, while the remainder of the district continued to have limited amounts.

8.

As a result, many Type III and IV marshes in the western counties continued to be dry. Waterfowl nesting and brooding sites were limited and critical this year. With the onset of the hunting season water areas for hunting were also scarce.

The drought finally broke in the western counties by late September. The ground was well saturated by freeze-up throughout the district due to excessive moisture received in October. Rivers and creeks were out of their banks and croplands flooded in the Cottonwood-Jackson County area on October 20th. Good water levels in most marshes, saturated ground and deep snow pack should all contribute to excellent water conditions next spring.

The potential value of ditch plugs constructed in 1967 could not be satisfactorily evaluated due to the drought prevailing. Next year should bring more favorable water conditions for examining the effects of ditch plugging.

1969
Report
will be
interesting
CWS

2. Food and Cover

Wildlife benefited by the open winter of 1967-1968, however food and cover were in short supply. The limited supply can be contributed to extensive fall plowing and burning in 1967. Also, a one inch ice cover by the end of 1967 made remaining food inaccessible to wildlife. However, a thaw on January 4th melted the ice and left the ground mostly exposed through the remaining winter.

Established grasslands showed little effects from the drought. Vegetative growth provided adequate cover during the nesting season. Some alfalfa and sweet-clover seedlings were damaged by the necessity to control noxious weeds with 2,4-D. During 1968, 1,500 acres of noxious weeds required control. It is unfortunate that we must divert funds from more beneficial uses to weed control when most weeds are useful to wildlife.

Grassland nesting and escape cover continued to be improved on our management units. Most cropland is seeded to clover, alfalfa and mixed grasses as full possession is acquired. In 1968, 1,667 acres were seeded to grass. Sufficient moisture was received in time for an average nurse crop and a good catch

of grass. With the procurement of a Nisbet grass drill, we anticipate that a greater number of acres will be seeded to native grass in the future.

With limited moisture and a mild spring, field operations started somewhat earlier than the previous year. The drought exerted little effect on crops, however spring and summer storms were responsible for some hail and wind damage to corn and beans. Corn and beans matured normally with farmers hoping for an above average harvest. Thirty wildlife food plots were planted to corn on WPAs this year, while 37 are planned for 1969.

Heavy fall rains played havoc with harvesting operations. As a result, nearly one third of the corn crop in the Benson area was still in the field on November 30th. In the Cottonwood-Jackson County area excessive moisture made it impossible to get into the fields before freeze-up. The year ended in that area with many acres of corn and some beans still unharvested. The water saturated ground also reduced fall plowing and burning. Provided wildlife is spared from heavy snow this winter, food will be plentiful and cover adequate.

Biotic changes were observed on many drying wetlands. Bullrush, cattail, etc., in some marshes died before reaching maturity. On other marshes already dry, the encroachments of wet soil plants were noted. These changes were conspicuous on most wetlands through Type III, however some Type IV marshes were also affected. Wild rice was observed for the first time growing on the Randall, Evjen, Ouren and Overby Units. It is suspected that receding water levels on deep marshes has stimulated its growth.

In the most part, rising water levels came too early for wet soil plants to mature, and too late for aquatics to benefit. As a result, waterfowl natural food quantity and cover quality dropped slightly below optimum. The accessibility of winter food and cover through the remaining winter had become questionable due to heavy snow accumulation by December 31st.

II. WILDLIFE

A. Migratory Birds

1. Waterfowl - (Anseriformes)

Waterfowl began moving into the eleven county district in early March. Mallards and Pintail were noted on March 5th in Traverse County. Both divers and dabblers were represented in large numbers throughout the district by the end of March.

Breeding conditions were universally poor due to very limited fall moisture conditions and an extremely dry winter. Spring runoff was virtually non-existent.

The breeding population including lone males on the three blocks that are surveyed annually totaled 137 total pairs of ducks and 25 pairs of coot. The 1967 total was 96 pairs of ducks and 9 pairs of coot.

Marsh quality for waterfowl production was rather poor throughout the summer. Many type IV marshes were dry and the type V marshes proved their importance as being the main supply of brood waters in some areas. Broods began appearing in late May. Water conditions improved in the eastern part of the district but the western part remained dry until heavy rains came in early fall. The formalized brood surveys first used in 1967 were repeated this year. Each of the two transects were run twice. Total broods observed for 1967 was 63 and 68 coot broods while in 1968 53 duck broods and 3 coot broods were observed on the surveys. Coot breeders and broods in past years have been very numerous and to the point of being serious competitors with waterfowl. The reduction this year is apparently due to the general lack of type IV marsh habitat.

Fall migration began around mid-September and quietly continued until freeze-up in early November. Whistling swans were rather common and remained in small numbers on several management units until freeze-up. Canada, snow and blue geese were very commonly heard and seen as they passed through.

2. Water and Marsh Birds - (Gaviiformes, Ciconiiformes,
Gruiformes)

Great blue herons and American egrets are common in the district. A colony exists on the Lovell Lake Unit of Stearns County. The green heron, black-crowned night heron, least bittern and American bittern are observed regularly. Sora and Virginia rails are fairly common in the district. King and yellow rails are believed to inhabit our area but reports are unconfirmed.

Pied-billed grebes are common nesters and coot are usually extremely common. A very noticeable decline in coot use and production was evidenced and apparently was due to the lack of type IV marsh habitat this year.

3. Shore birds, gulls and terns - (Charadriiformes)

Woodcock are known residents in the district and observations have been made on our units. Their population is believed to be very low however.

Wilson's snipe are very common in the spring and fall and common during the summer months. Sandpipers, yellow-legs, plovers, godwit and phalarope are found throughout the area but their abundance hasn't been measured.

The herring, franklins and ring-billed gulls are common warm season residents. Forsters, common and black terns are noted frequently.

4. Doves - (Columbiformes)

Mourning doves are common residents and frequently nest on our units. Banding proved successful this year and is covered more completely in Section V.

B. Upland Game Birds - (Galliformes)

The prime pheasant range of Minnesota is located in the district. Cover conditions on private land continues to deteriorate. Management and development on our land is also geared to improving upland game conditions wherever possible.

The random sex-ratio count during the 1967-68 winter involved 125 pheasants and resulted in a ratio of 1 male to 1.19 females. The 1966-67 count totaled 357 birds and a ratio of 1:1.83.

The Agricultural Stabilization and Conservation Service is now spending the majority of their ACP money in this area on wildlife and related projects. This is a vast improvement over the recent days when they spent nearly all their ACP money on drainage and wildlife habitat destruction. The ironic thing about it is though that most of the marsh habitat has been destroyed and now they are reversing their emphasis.

Ruffed grouse have definitely been noted on the Christenson Unit in Kandiyohi County. Several units in the north-eastern part of the district doubtlessly have small populations.

Hungarian partridge are occasionally noted in the district but not on our units so far.

C. Other Birds - (Falconiformes, Strigiformes, Passeriformes, and Pelecaniformes)

Marsh, red-tailed, red-shouldered, goshawk, and sparrow hawks are all at least occasional inhabitants of the district and our units. Osprey have been noted on the Evenson Unit in Kandiyohi County. Great-horned owls are common residents and barred, screech and barn owls are occasional visitors.

Double-crested cormorants are common visitors to many of our units. White pelicans are common during migrations. Belted-kingfishers and crows are common warm season residents with some of the latter remaining year around.

Many perching birds are found on the units and apparently thrive on the protected and undisturbed cover around old farmsteads and brushy areas.

D. Big Game Animals

White-tailed deer are common throughout the district and thrive on our units. Dense marsh emergents provide some very good protective cover and the uplands provide good year around cover. We estimate that around 1000 deer frequent the units.

E. Fur Animals, Predators, Rodents and Other Mammals

The muskrat population is down from 1967 as evidenced by fewer houses. Drought conditions during the fall of 1967

and throughout the winter resulted in poor water conditions. Reproduction was doubtlessly low by muskrats with the lack of habitat. Mink remain common on management units but it is suspected they may be down from last year.

Beaver are common throughout the district but so far none are known to exist on our lands.

Red fox continue to maintain themselves successfully despite heavy trapping, hunting and snowmobile pursuits. Pelts are drawing up to \$15.00 and the price is rising. Cottontail rabbit, fox squirrel and gray squirrel are common. Thirteen-lined ground squirrel, franklins ground squirrel, pocket gopher, and chipmunk are abundant as well.

F. Rare, Endangered and Status Undetermined Species

There are no threatened species known to exist in the district.

G. Fish

Year around fish populations are rare on our wetland units. Most marshes are far too shallow to overwinter fish. This factor is actually a benefit since rough fish are eliminated at least once a year.

III. W.P.A. Development and Maintenance

A. Physical Development

Fencing to eliminate trespass and encroachment continued to be a major development activity. A total of 9.8 miles of new fencing was constructed on eleven different units. Every management unit was once a part of an agricultural operation and consequently involves quite a complex of old fences. Aesthetic values and safety factors are greatly improved by riddance of the old fences.

The barbed wire winder that we developed this year has been a terrific help. For every mile of new fencing needed on the units at least a mile and one half of old junk fence must be removed. We now estimate new fence needs at around 200 miles so our fence cleanup work is overwhelming.



Old Fence Removal (Motzko and Hauken) showing
newly developed portable wire winder, Thone Unit
Pope County

68, 58, 11-1, JCW

TABLE IV MAJOR PHYSICAL PROJECTS			
County	Unit	Item and Amount	Remarks
Big Stone	Bucholz	New Fence, 180 Rods*	F, 11.2 md
	Bauman	Fence Removal	F, 3.1 md
	Boehnke	Fence Removal	F, 1.2 md
	O'Connell	Fence Removal	F, 1.6 md
	Wagoner	Fence Removal	F, 2.5 md
Cottonwood	Ewert	New Fence, 146 rods*	F, 10.0 md
Jackson	Ewen	New Fence, 388 rods*	F, 26.0 md
Kandiyohi	Loven	New Fence, 334 rods*	F, 22.0 md
	Sonstegard	New Fence, 470 rods*	F, 39.1 md
	Loven	Ditch Plug, 1	F, 1.0 md
	Randall	Erosion Control, 1	F, 2.0 md
	Randall	Fence Repair	F, 2.0 md
	Bishop	Ditch Plugs, 6	C
	Hodak	Ditch Plugs, 3	C
	Hodak	Tile line destroyed, 1	C
	Olson Lake	Ditch Plug, 1	C

County	Unit	Item and Amount	Remarks
Pope	Evjen	Fence Removal	F, 2.6 md
	Froland	Fence Removal	F, 13.5 md
	Gjerdengen	Fence Repair	F, 2.0 md
	Heidebrink	Fence Removal	F, 5.3 md
	Shirmer	Fence Removal	F, 0.4 md
	Thone	Fence Removal	F, 11.3 md
Stearns	Schaefer	New Fence, 120 rods*	F, 12.5 md
	Bahr	New Fence, 344 rods*	F, 15.0 md
Stevens	Kopitzke	Ditch Plug, 1	F, 0.5 md
	Grossman	Fence Removal	F, 0.4 md
Swift	Kill	Fence Removal	F, 5.0 md
	Lamprecht	Fence Removal	F, 10.7 md
	Stimmler	Fence Removal	F, .7 md
	Hoffman	New Fence, 483 rods*	F, 23.0 md
	Swenson	New Fence, 270 rods*	F, 18.7 md
	Welker	New Fence, 65 rods*	F, 3.4 md
	Rice	Ditch Plug, 1	F, 1.0 md
	Lubenow	Fence Removal	F, 3.7 md
	Wetherell	Fence Removal	F, 8.7 md
	O'Neill	New Fence, 340 rods*	F, 43.0 md
Traverse			

*Including old fence removal

C= Contract

F= Force Account

md= 8 hour man days

Old building sites were cleaned up on the Fischer, Yarmon, Evenson, Sixta, Hodak, Christenson, Bishop, W. Peterson and Shimek tracts in Kandiyohi County and the Jordan, Georges, Schulz, Schirmer and Grundseth tracts in Pope County. Also cleaned up were building sites on the Wehseler tract in Stearns County, the Overby tract in Lac qui Parle County and the Anderson tract in Swift County. The Wiebener and Schwarzenbach tracts in Jackson County were cleaned up while the maintenance crew was fencing in the southern counties and then leveled by contract. The Fischer, Yarmon, Olson Lake, Flann, Hodak, Peterson, Grundseth, Bishop, Christenson, Sixta, Schulz, and Larson tracts building sites were filled and leveled by a contract dozer.

Food plots were measured and marked on many different units. A total of 30 units had permanent food plot rotations in 1968 and 37 units will have them in 1969. Where suitable upland is available and nesting cover is plentiful food plots have proven to be very useful to

16.

overwintering wildlife and to migrating waterfowl in the spring. Each rotation system involves three 10 acre plots rotating corn, oats-alfalfa and alfalfa.

Erosion problems must be dealt with immediately to prevent siltation in marshlands. We have no heavy equipment but many eroded areas may be rehabilitated by hand. The following before and during pictures involve a serious gully erosion that threatened the longevity of a marsh.



Gully Erosion Problem on Randall Unit, Kandiyohi County
68, 4, 4-5, JJH



Gully Erosion Control by Motzko and Nelson on
Randall Unit, Kandiyohi County.
68, 6, 5-1, JJH

Although gully erosion isn't wide spread among management areas the problem is serious. Some units receive silt from neighboring lands and we can't deal directly with the problem as if it were on our own land. Buffer strips in such cases are being used to attempt to de-silt entering water. Some neighbors may be encouraged to apply preventive practices on their own land to control the erosion.

Two small buildings on the Artichoke Unit that were old and unused were burned and the foundations leveled by hand. The barricade on the Heidebrink access road was improved and completed. Survey corners were marked on dozens of units. Safety reflectors were placed on the inside of all doors on the outside bottom corner. The shop was reorganized and storage areas were built.

Two loads of gravel were placed in a low spot on a boundary trail on the Christenson Unit in Kandiyohi County. The plugging of a ditch and restoration of a marsh resulted in the soaking of the trail which was used by a neighbor. Although we do not use the trail we are apparently liable to leave it passable. The neighbor was assured that we are not going to maintain the trail with further gravel and brush clearing for his private use.

Approximately 89 miles of boundary posting was completed prior to the hunting season. Included were 79 separate units and 99 tracts. Many of the posting projects involve boundary re-posting because of the addition of a new tract to a unit. The Benson Wetland Management District had 193 units posted and open to public hunting in 1968 which totaled 26,922 acres. This compares with 147 units in 1967 totaling 21,000 acres.

Ditch plugging plans in the fall were interrupted by extreme moisture conditions. It was impossible to work a dozer and blade in most of the moist ditch bottom. We managed to get ten ditch plugs constructed and one tile line destroyed by contract just before freeze-up. Three small plugs were constructed by hand during the summer.

Those tracts that weren't boundary surveyed during acquisition were measured and marked by the maintenance men. These lines are arbitrary but the best available presently. Minor maintenance on all vehicles was completed in the shop. The lack of detailed equipment prevents major repairs by force account.

B. Plantings Including Soil and Moisture Activity

1. Trees and Shrubs

The shrub planting on the Olson Lake Unit was cultivated by the Minnesota Conservation Department. Replants were also made to fill the gaps. These snow-catch and upland game cover plantings have wide adaptability. When we solve the maintenance factor and cost problems in caring for woody plantings we'll find that a large number of units could be made into even better wildlife areas through use of these plantings.

2. Grasslands

A total of 1,668 acres of retired cropland was seeded down to small grain and alfalfa. This was accomplished by cooperative farming agreements with 64 individual farmers. The usual arrangement was for the operator to supply all the small grain and five pounds of certified alfalfa per acre in addition to doing the field work. For this he would get all the nurse crop. We supplied alfalfa seed in the amount of five pounds per acre to be applied in addition to the operator's share. Most of the cropland involved was very marginal and will be best suited to nesting cover. Limited acreages are being established in permanent food plot rotations as

described below. Many additional contacts were made to determine from past landowners or operators that the land was already seeded to permanent cover. A summary of seeding activities is included in NR-8, Cultivated Crops.

It is impossible to have farmers in Minnesota seed the desirable native grasses. One look at a bag of chaffy seed and it's liable to be thrown in the ditch. A small amount of the fine seeded natives will be tried in 1969 to at least get a few native plants in each seed-down.

C. Cultivated Crops

Upland game food plots are being established where there is a need and suitable cropland is available. Rotations involving corn, small grain-alfalfa and alfalfa were used on 30 separate units in 1968 and 36 are planned for 1969. Ten acres are required for each of the three plots on each unit. Our share each year is one-third of the corn left standing and all the alfalfa to be plowed down. The operator on each rotation system gets all the small grain and two-thirds of the corn each year. To eliminate the problem of the operator leaving the poorest corn for our share, an alternate-row harvest system has been set. The operator takes eight rows and leaves four rows alternately across the field. This has worked out nicely and even during rough winter the majority of the standing corn is available to upland and big game since the first few rows catch most of the snow. The plots are located near good winter cover and on units where plenty of other good nesting cover exists.

D. Collections and Receipts

1. Building Disposal

Surplus real property was disposed of through bid invitation in February. Seven building sites were involved and included twenty four buildings. Good response was realized as 34 bids were placed. Receipts for the buildings totaled \$4084.76. Unfortunately this money is not available for needed development in the district but is deposited in the general treasury of the United States.

A total of 120 buildings have been sold by this office during the past four years for a total of \$12,957.69. It bears repeating that it's unfortunate this money isn't added to the operating account of the wetland management project or even to the bureau.

The sale of these buildings is costly and time consuming because of late removals, non-payment, poor cleanup and a lot of administrative problems. There is little choice however since we neither have the need nor the funds to maintain these buildings. Possibly a set of buildings will be purchased some day that would make a good headquarters or residence site.

Most of the building sites were purchased because of their proximity to the marsh and excluding them would have offered future boundary, hunting and trespass problems.

E. Control of Vegetation

Weed control through spraying and mowing was necessary on nearly fifty units. Time spent and value received is a very good subject for complete analysis. The future of wetlands acquisition could easily hinge on the attitude of neighboring landowners, vendors and county officials. Most of these individuals regard weed control everywhere as an absolute must even though it is apparent that several decades of weed control has proved only one thing - more weeds. The value to wildlife is of course negative and we find that a great many weed patches are excellent cover areas.



Aerial spraying, apparently our most efficient weed control method in view of the fact there are so many separate problem areas. 68, 34, 7-25, JCW

Primary weed problems are sow and Canada thistles, leafy spurge and sunflower. The Minnesota weed laws however, list the pasque flower, phlox and smartweeds as weeds. This is usually an interesting point to bring up with weed inspectors. The pesticide applications are summarized in NR-12.

IV. RESOURCE MANAGEMENT

A. Grazing

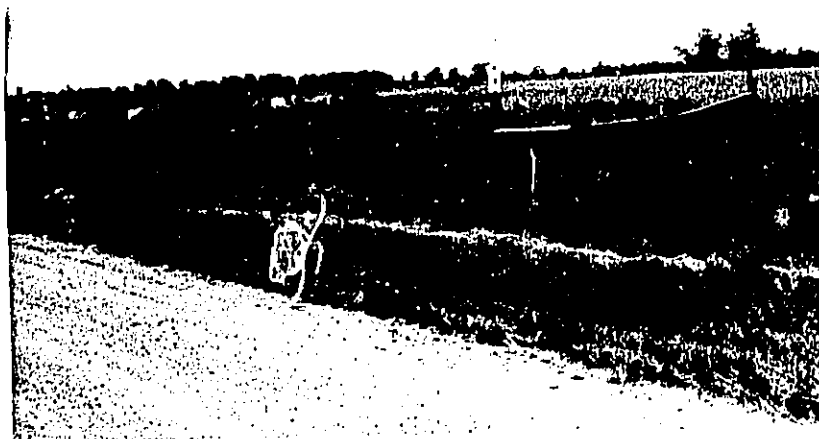
Our philosophy and policy concerning grazing has changed very little in three years. Grazing continues to be allowed on a permit basis when not in conflict with basic wildlife management objectives and size and condition of the unit warrant such use. Grass seeding, fencing and retiring overgrazed pastures are factors considered prior to permitting grazing on WPAs. Our goal calls for very moderate grazing from the standpoint of wildlife habitat enhancement. A minimum rate of eight acres of grass per head for a maximum five month season has remained the criterium for determining AUMs permitted on WPAs. The price of \$2.00 per AUM still seems to represent fees charged in the area.

The charge and/or acres per AUM may be adjusted later as deemed necessary. Presently, we are contemplating a change in the yearling (6-18 months old) class from the breakdown of an AU. This has come about due to past difficulty in separating yearlings from adults and yearlings carrying calves. Also, calves were increased in 1968 from 1/4 to 1/3 AU per head.

Table V reflects the magnitude of our 1968 grazing program as well as totals for 1967 and 1966. Grazing privileges were granted on eight management units for the reporting period while 12 units were grazed in 1967. Three units previously grazed remained idle in 1968 due to a lack of interest. The Gjerdingen Unit was opened for grazing while grazing was deferred on the Edwards and Wetherall Units in 1968.

A marked leveling off of the grazing program was quite evident in 1968. Farmers once thought our wetlands offered generous grazing just for the asking. However, a clearer understanding of our policies has caused farmers' interest in grazing to decline.

1968 GRAZING PROGRAM				
Management Unit & County	Grazing Habitat	Total AUM's	Date of Use	Revenue Collected*
Bakalyar (2), Cottonwood	64	30	5/1-9/30/68	\$60.00
Elder (19), Pope	145	90	5/1-9/30/68	180.00
Evjen (8), Pope	84	42	6/1-9/30/68	84.00
Ewen (3), Jackson	138	80	6/1-9/30/68	160.00
Freese (4), Kandiyohi	120	75	5/1-9/30/68	150.00
Gjerdingen (5), Pope	45	25	5/1-9/30/68	50.00
Sonstegard (20), Kand.	106	66.25	5/1-9/30/68	132.50
Welsh (4), Swift	176	110	5/1-9/30/68	220.00
1968 Totals	878	518.25		\$1,036.50
1967 Totals	1,199	703.0		\$1,406.00
1966 Totals	804	428.0		\$856.00
*Total @ \$2/AUM				



Some fencing done to improve cover through grazing, Sonstegard Unit, Kandiyohi County
68, 33, 6-27, JCW

B. Haying

Again in 1968, haying was kept at a minimum. The destruction of habitat and setting of precedence are the main factors against it. When possible, native hay is included in grazing units. Native and tame hay lands are retired to allow maximum nesting and escape cover as well as native grass invasion.

Haying has been used in a few cases to control weeds. The farmer is permitted to take the hay in turn for clipping the weeds, however this is geared to the best control of the weed infestation. In the future, haying may be necessary where a monotype must be opened up or other unusual circumstances exist. Restricting mowing until July 15th has discouraged farmers because the quality of hay has dropped by this time.

C. Fur Harvest

Interest in trapping on WPAs continued to show a slight increase over previous years. However, this activity remained mediocre and widely scattered over the district. The establishment of a trapping plan for our WPAs is not practical or warranted at this time.

It is evident that through good public relations, interest in trapping on our WPAs has increased. One trapper stated that the success of two trapping friends on WPAs has caused him to shift his operation to include federal wetlands. Trapping interest on our wetlands evolved from the fact that neither permission nor rent is required. Also our wetlands supply prime trapping territories. Several WPAs are generally included within a trappers territory.

Realistic data for analyzing the status of the resource is difficult to obtain. This is contributed to a limited number of trappers over a widely-scattered area and insufficient man-hours for conducting a survey. Once all major trappers using our wetlands have been identified, the procurement of fur harvest data may be possible.

The influence of certain factors on the 1968-1969 trapping season has kept trapping success in doubt. One area fur buyer has handled only 3,000 muskrat pelts to date as compared to 50,000 to date the previous season. This indicates a population decline, undoubtedly linked to the drought. Also indicative of the drought's influence is the trapped sex ratio of mink. The ratio reversed this season from the usual 4 : 3 to four females to every three males. This suggests the scarcity of mink food, primarily frogs and

rats due to the drought. Recorded snow pack over the district by December 31st also exerted its effects on trapping operations. A major influence on 1968-1969 trapping operations has been the sky-rocketing market price for fox pelts, while the price for muskrat pelts remained low. This has caused an increasing interest in fox trapping. Two trappers making heavy use of our WPAs have reportedly taken 70 red fox by the close of 1968. Red fox pelts are now bringing up to \$15 on the market.

D. Other Resources

An interest still exists for management of bee apiaries on our waterfowl production areas. Our wetlands offer excellent yard sites with an abundant pollen supply and exclusion from disturbances. Special-use permits were issued to three bee keepers covering five bee yards. These same five bee yards were covered by permit in 1967. The charge was set at \$10.00 per apiary in 1968. Bee keepers state that honey production in 1968 was the lowest in years due to the weather.



(Bee) Apiary: Paulson Unit, Pope County
68, 24, 5-1, JCW

is there
any other kind
of APIARY?

V. FIELD INVESTIGATION OR APPLIED RESEARCH

A. Wildlife Management Studies

Only one management study is in progress now, however two cooperative studies are under consideration. The two proposed studies will involve waterfowl cover preference and a study to test the effects of reduced agricultural operations on waterfowl production.

1. Cooperative Nest Cover Width Study

The Benson Wetland District, several refuges and other wetland districts are cooperating on this wildlife management study. Wildlife Management Biologist Merrill Hammond, heads the project with responsibilities for supervision and research. Northern Prairie Wildlife Research Center is supplying research assistance.

The objectives of the nest cover width study are as follows:

Primary

- 1) To compare dummy nest survival rates in different cover block widths.
- 2) To compare natural nest densities in different cover block widths.
- 3) To compare natural nest survival rates in different cover block widths.

Secondary

- 4) In some samples, to compare the relative attractiveness of different cover types and cover densities.
- 5) To compare dummy nest and natural nest survival rates.
- 6) To determine the efficiency of the flushing device used, and of the search after haying.

The Stimuler Unit was selected for use in the study. The dummy nest study phase was initiated during 1968. On June 7th, the study blocks were located and staked using the alternate A design. Then, 84 chicken eggs were placed at intervals; one to a station. The vegetative cover on the blocks ranged from thin quackgrass-thistle to heavy quackgrass.

An abstract for the overall study for this year was not made available by the area biologist in time for this narrative report. However, some results are

available for the Benson District portion. Inspection of dummy nests on June 28th revealed the following results:

- 1) Survival successes on the blocks were:
 0% survival on the 33 foot wide block
 57.7% survival on the 99 foot wide block
 34.7% survival on the 165 foot wide block
 42.3% survival on the 330 foot wide block
- 2) Three fox dens on the study blocks were found inactive on June 28th.
- 3) Two natural blue-winged teal nests on the blocks were found molested on June 28th. However, it was not possible to determine if this occurred before or after hatching.

Eggs placed on the narrower width block appeared to be more vulnerable to predation. However, results for the over-all study will be required to arrive at any realistic conclusions.

B. Biological "Tinkering"

1. Banding

A pre-season dove banding program was initiated during 1968. The objective was to contribute to the Bureau's nationwide banding program and the 2,000 bird quota set for Minnesota. Pre-baiting was started July 19th. On July 23rd, three collapsible funnel type traps were set. Trapping by shifting eight traps between six locations continued thereafter until August 24th, when the operation was discontinued due to excessive repeats. A total of 264 doves were banded, while 42 of these were retrapped. Eighty per cent of the birds banded were immatures. The greatest number (177) of birds banded were trapped adjacent to our quonset-workshop near Benson. With good trapping sites already selected, additional traps available and an early start in 1969, more doves should be banded than in 1968.



Mourning Dove trapping - banding, near
warehouse, Swift County 68, 19, 7-28, JCW



Site where 177 mourning doves were trapped
and banded, near warehouse, Swift County,
Benson, Minn. 68, 17, 7-28, JCW

2. Pothole Blasting

The primary objective for pothole blasting on WPAs is to test the effectiveness of this proven developmental technique for increasing the production area on small wetlands. A secondary objective is to establish demonstration areas for future reference and public relation purposes.

Ten artificial potholes were created in 1966, while 18 more were established in 1967. No additional potholes were blasted in 1968 due to limited funds and excessive fall moisture. Although some waterfowl use occurred on most of these potholes, the 1968 drought made it difficult to analyze waterfowl acceptance. As demonstration areas near public access, they have created much interest. Several inquiries were received in 1968 by individuals wanting to blast potholes on their own land in the name of conservation.

3. Records of Observations

The system established in 1967 for recording daily observations continued to remain in effect this year. Two separate permanent records are maintained from observations recorded in field diaries. One is a chronological listing of all observations for use in narrative report preparation. The other record is a listing of observations by counties, units, tracts and private lands. This record will serve as a permanent historical account for individual areas.

C. Wildlife Inventory

Waterfowl breeding pair and brood surveys were conducted in the Benson Wetland District for the second year. Inventory procedures were in accordance with the Waterfowl Inventory Plan completed December 1967. The primary objective for these surveys is to measure waterfowl production and trends so that they might be directly related to management and developmental functions.

Survey data was submitted to the Area Biologist for statistical analysis. Results of waterfowl surveys for this district are summarized under Section II of this report.

VI. EASEMENT ADMINISTRATION

The 344 existing easement tracts were inspected by air this year. Flying time in a rented Tri-Pacer (@ \$19./hr.) and a Piper Arrow (@ \$25./hr.) totaled 14 hours. The total expense for rental of pilot and plane was \$293.00 as compared to \$505.00 in 1967. The more reasonable charge in 1968 can be contributed to an efficient pilot, fewer possible violations involved and purchase units excluded from the examination. Chandler Flying Service out of Alexandria, Minn. supplied the pilot and aircraft.

Aerial inspections were accomplished during four flights occurring on November 26th and 27th, and December 9th and 10th. Although some snow cover existed during the inspection, it did not pose a problem.

The heavy snow pack has delayed ground inspections of possible easement violations detected by air. It is suspected that very few actual violations will be found when weather conditions permit examinations. The decline in violations from 1967 can be partially contributed to excessive fall moisture which restricted fall burning and draining. All drainage violations in 1967 were satisfactorily corrected by the landowners during the spring of 1968.

Public acceptance of our easement program remains at a low ebb. Increasing land values and more emphasis on drainage has turned landowners against encumbering their lands with perpetual easements.

VII. PUBLIC RELATIONS

A. Recreational Uses

Public use, that unknown factor in wetlands management is probably greater than most of us dare recognize. Total use was up about 6,000 visits over 1967. As more manpower becomes available recreational use will be measured more specifically. Recreational use for the year is summarized in table VI.

TABLE VI
Bureau of Sport Fisheries and Wildlife
Division of Wildlife Refuges

ANNUAL
MONTHLY PUBLIC USE REPORT

30.

(This block completed by Washington Office)

State Code 23 (1-2)	Congressional District Code 07 (3-4)	Refuge Code 315 (5-7)	Report Yr. Mo. Calendar Period Annual Year 1968 (8-11)
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Refuge name BENSON W.P.A.
State MINNESOTA

(Card Columns)			
ACTIVITY	Code	12-13	14-18
		VISITS FOR THE MONTH	
		Total Number	Total Hours
Hunting: Big Game	01	1000	2000
Upland Game	02	5500	11000
Waterfowl	03	7500	15000
Other Migratory	04	300	600
Bow	05	1400	2800
Fishing: Salt Water	06		
Warm Water	07	80	160
Cold Water	08		
Blind Animal Calling	09	100	100
Wildlife Photography	10	500	500
Wildlife Observation	11	10800	10800
Training	12	120	240
Field Trials	13		
Wildlife Trails and Walks	14		
Wildlife Tours	15		
Wildlife Scenic Veh. Rts.	16		
Camping (related to above)	17	175	4200
Picnicking (related to above)	18	125	250
Wildlife Interpretive Center	19		
*Miscellaneous Wildlife	20	8700	16400

(Card Columns)			
ACTIVITY	Code	26-27	28-32
		VISITS FOR THE MONTH	
		Total Number	Total Hours
Swimming	21	50	100
Boating	22		
Water Skiing	23		
Camping	24		
Group Camping	25		
Picnicking	26		
Horseback Riding	27	150	150
Bicycling	28		
Skiing, Sledding, etc.	29	550	550
Ice Skating	30	100	100
Fruit, Nut. & Veg. Collecting	31	110	210
Non-Recreational Use (inspections, audits, etc.)	32	470	275
Actual Visits	33	31665	
Peak Load Day	34	5450	
* Miscellaneous Non-Wildlife	35	700	960
TOTAL VISITS (35,235)			
(Report Based On 193 Mgt. Units Totaling 26,922 Acres)			

Code 10 - Wildlife Photography

Include here all photography occurring on the area--professional, amateur, blind use, etc.

Code 11 - Wildlife Observation

This category includes the general sightseeing user. It may involve the "windshield viewer" on some areas and walking observers on areas where trails are not designated.

Code 14 - Wildlife Trails and Walks

This would include all use of designated, self-guided trails and walk areas.

Code 15 - Wildlife Tours

All guided use would be included here--both vehicle tours and foot trail programs.

Code 16 - Wildlife Scenic Vehicle Routes

Don't confuse this category with general sightseeing. Use here refers to designated self-guided vehicle drives.

Code 19 - Wildlife Interpretive Center

This includes visitor center and office/visitor center facility use. To avoid other activity duplications, you should establish an average hour use for this category while visitors are actually in the visitor center. Once they leave the center, they will be recorded in some other activity.

Code 20 - Miscellaneous Wildlife

This category is the catch-all under wildlife-oriented uses. Those visits that do not fit any of the above activities would be recorded here. List the total number of visits and total hours and below the type of activities involved. Included in this category would be fur trapping, varmint hunting, nature studies, girl and boy scout activities, inquiries on hunting and fishing, visits by other agency people to discuss wildlife programs, etc.

Codes 21 to 32

Includes all non-wildlife-oriented uses. Snowmobile use would be put under Code 29--skiing, sledding, etc.

Code 33 - Actual Visits

This is the actual head count category. Since most visitors will be recorded in more than one activity, Code 33 will be the only place to measure individual visits. The total visits for the month includes both wildlife and non-wildlife-oriented activities.

Code 34 - Peak Load Day

List the largest number of visitors recorded on any one day during the report period.

Code 35 - Miscellaneous Non-Wildlife

Include here those non-wildlife-oriented uses that cannot be placed elsewhere. These could include: Industrial, economic, permittee, businessmen users, tower climbers, hikers, and non-wildlife inquiries.

Note:

A minimum of one hour should be used for all activities.

B. Wetland Office Visitors

The following list actually represents the visitors to the Wetland Management Office and not to the projects. Routine visitors not listed include the Area Acquisition Office staff, Paul Wojahn, Ed Wieland, and John Scharf, MCD; ASCS Office staff; and Paul Pederson, building owner.

TABLE VII

WETLAND MANAGEMENT OFFICE VISITORS

Person or Group	Date	Purpose
Harm Heidebrink, Swift Falls	1/2/68	Heidebrink Access Road
Lloyd Erickson, Kerkhoven	1/8/68	Excess Buildings
Elmer Eutenever, Albany	1/11/68	Excess Buildings
Randall Rodahl, Benson	1/15/68	Game Farming
Warren Braaten, Glenwood	1/23/68	Special Use Permit
Walter Esplen, Spicer	1/23/68	Government Signs
Mike Pederson, Benson	1/25/68	Easement Development
Mr. & Mrs. W. Nelson, Pennock	1/26/68	Excess Buildings
Frank DeWees, Murdock	1/26/68	Excess Buildings
Olaf Grundseth, Murdock	1/29/68	Excess Buildings
Floyd Neuhouse, Benson	1/30/68	Bird House Information
Leonard A Morrill, Clinton	1/30/68	Building Disposal
Orrin Magedanz, Clinton	1/30/68	Building Disposal
Jerry Erickson, Raymond	1/30/68	Building Sale
August Hofman, Benson	2/2/68	Building Sale
Erwin Serr, Sunburg	2/5/68	Building Sale
August Hofman, Benson	2/5/68	Building Sale
George Winkels, Albany	2/6/68	Building Sale
Anton Hanneken, Albany	2/6/68	Building Sale
Bud Jonas, Albany	2/6/68	Building Sale
Ray Jonas, Albany	2/6/68	Building Sale
James S. Smith, Beardsley	2/6/68	Building Sale
Bruce Mattson, Lake Lillian	2/6/68	Building Sale
Dozer Operator, Graceville	2/8/68	Building Sale
Erwin Serr, Sunburg	2/8/68	Building Sale
Leon Cobb, Willmar	2/23/68	Building & Junk Disposal
Tony Voellen, Starbuck	2/23/68	Building Sale
Leonard Strand, Benson	2/27/68	Building Sale
Don Jorgenson, Clinton	2/27/68	Tree Planting
Curtis Proder, Donnelly	3/6/68	L. P. Land
Floyd Anderson, Lowry	3/6/68	Grazing
Mr. Walsher, Sunburg	3/6/68	Aasen Unit Plugs
Stanton J. Nelson, Starbuck	3/7/68	Crop Allotment
Albert Overby, Terrace	3/12/68	Selling Marshland
Walter Boyle, Auditor-Pope Co.	3/15/68	Refuge Rev. Sharing Act
Harry Jagow, Holloway	3/15/68	Drainage WPA
Art Webber, Melrose	3/19/68	Building Disposal

Tony Webber, Sauk Centre	3/19/68	Fencing and Grazing
Dick Lane, Graceville	3/20/68	Easement Violation
Mrs. Louis Elder, Hancock	3/25/68	Grazing
Harris Gjerdingen, Benson	3/25/68	Grazing
Kenneth Hacker, Canby	3/25/68	Fencing WPA
Ralph Brenden, Glenwood	3/26/68	Fencing
Floyd Guyott, Sunburg	3/29/68	Fencing
Eugene Struck, Donnelly	4/1/68	Seeding
Mrs. Feeken, Willmar	4/1/68	Building Sale
Orville Koosman, Appleton	4/3/68	Food Plot Rotation
Mrs. Louis Elder, Hancock	4/8/68	Grazing
Harris Gjerdingen, Starbuck	4/8/68	Grazing
Larry Hegreberg, Spicer	4/15/68	Bee Permit
Louis Elder, Hancock	4/18/68	Grazing
Floyd Guyott, Pennoek	4/22/68	Fencing
Ralph Brenden, Glenwood	4/22/68	Fence Removal
Thov Svingen, Benson	4/23/68	Easement Development
Alfred Evjen, Starbuck	4/24/68	Grazing
Mrs. Harris Gjerdingen, Benson	4/30/68	Grazing
Floyd Guyott, Pennoek	4/30/68	Fencing Material
Eric Rood, Kerkhoven	5/6/68	Building Disposal
Walter Johnson, Benson	5/6/68	Land Exchange
Ralph Town, Lake Andres, S.D.	5/6/68	Visit - Biological Studies
Norman Hagen, Cyrus	5/7/68	Fencing
Siebe Wilts, Murdock	5/8/68	Building Disposal
Gerhard Mitteness, Benson	5/9/68	Grazing
Alfred Evjen, Starbuck	5/13/68	Grazing
Ingmar Hanson, Brooten	5/16/68	Building Disposal
Don Grundseth, Brooten	5/16/68	Building Disposal
Wes McKay, Redwood Falls	5/23/68	Weed Inspection
Mrs. Erwin Seer, Sunburg	5/27/68	Building Disposal
Clinton Hinseth, Brooten	5/31/68	Building Sale
Walden Nelson, Pennoek	5/31/68	Building Sale
Mr. Erdman, Clontarf	6/10/68	Weed Problems
Jim Nelson, Benson	6/19/68	Weed Problems
Harold Anderson, Kerkhoven	6/24/68	Building Disposal
Mr. Nohl, Hancock	7/2/68	Weed Spraying
Cliff Boss, Dawson	7/11/68	Weed Problems
Dale Flickinger, Spicer	7/11/68	Fencing Problems
Carrol Johnson, Chokio	7/26/68	Weed Problems
Ardell C. Bjorge, Minneapolis	7/26/68	Building Disposal
John Harder, Kerkhoven	7/26/68	Buildings
Mrs. Tony Voeller, Starbuck	7/29/68	Building Removal
E. W. Angus, Willmar	7/30/68	Road Imp.
Olaf Froland, Starbuck	7/31/68	Weed Mowing
Richard Burns, Clontarf	8/2/68	Weed Problems
Irvin Thone, Swift Falls	8/12/68	Food Plot & Fence Post Disp.
Francis Eisenreich, Murdock	8/15/68	Blasting
George Gard, Fergus Falls	8/19/68	Road-Highway Co-ordination

Fred Gerde, Sedan	8/20/68	Fencing
Howard Sitter, Ortonville	8/21/68	Seed Down
Loren L. Danielson, Correll	8/27/68	Tiling
Mr. Haugen, Madison	8/30/68	Building Sale
Irvin Thone, Swift Falls	9/3/68	Weed Control
Cornell Peterson, Brooten	9/4/68	Building Sale
L. W. Carlson, Murdock	9/10/68	Drainage
James D. Johnson, St. Paul	9/11/68	Selling Pesticides
Curt Gullickson, St. Paul	9/11/68	Selling Pesticides
Bert F. Flaten, Murdock	9/12/68	Farming
Richard H. Anderson, Chokio	9/16/68	Weed Control
Oliver Anderson, Chokio	9/16/68	Weed Control
Gerhard Mitteness, Benson	9/18/68	Grazing
Don Werder, Willmar	9/19/68	Hunting Information
Clarence Fread, Sedan	10/1/68	Buildings
Galen Ward, Sedan	10/1/68	Buildings
William Stier, Appleton	10/1/68	Boundary Markers
Mr. Lubenow, Appleton	10/1/68	Boundary Markers
Leslie Bruns, Morris	10/2/68	Posting
Dave Swendson, Fergus Falls	10/2/68	Law Enforcement
Jim Meyers, Elbow Lake	10/2/68	Law Enforcement
Roy Peterson, L.Q.P. St. Refuge	10/9/68	Building Procurement
Orland Anderson, L.Q.P. Refuge	10/9/68	Building Procurement
Leonard Rustad, Clontarf	10/21/68	Building Removal
Sidney Rustad, Clontarf	10/21/68	Building Removal
Mervin Swenson, Benson	10/24/68	Road Gravel
Roy Gustafson, Benson	10/24/68	Post Hole Digger Repair
Larry Goggin, Benson	10/24/68	Tires
Wes McKay, Redwood Falls	10/28/68	Weeds
Mr. Pearson, Osakis	10/28/68	Hunting Map
Harvey Hoffman, Clontarf	11/29/68	Fencing
Harry Klyve, Starbuck	11/29/68	Refuge Receipt Pmts.
Norman T. Hagen, Cyrus	12/3/68	Snowmobiles on WPAs
Rhonda Wiebold, Benson	12/3/68	Info.-Girl Scout Newsletter
Leonard Rustad, Clontarf	12/26/68	Seed Down

C. Wetland Participation

1/2	Contacted Stevens County Auditor re. Compliance Report	Hubert
1/15	Attended Agr. Pesticides Course, Minneapolis	Hubert
1/18	Attended Upper Minn. River Watershed, Ortonville	Hubert
1/18	Attended RC & D meeting, Terrace	Hubert and Womble
1/30	Attended Upper Watonwan Watershed meeting near Windom	Hubert

- 2/2 Presented program at weed inspectors meeting, Morris Womble
- 2/5 Presented program at weed inspectors meeting, Clinton Womble
- 2/6 Presented program at weed inspectors meeting, Wheaton Womble
- 2/7 Presented program at weed inspectors meeting, Benson Womble
- 2/8 Presented program at weed inspectors meeting, Dawson Womble
- 2/14 Presented program at weed inspectors meeting, Glenwood Womble
- 2/15 Attended Big Stone Refuge hearing, Ortonville Hubert
- 2/20 Attended County Ditch hearing, Benson Hubert
- 2/20 Presented program at weed inspectors meeting, Willmar Womble
- 2/29 Attended Upper Watonwan Watershed meeting, Windom Womble
- 3/11 Attended Upper Mn. River Watershed meeting, Ortonville Hubert
- 3/19 Participated in Willmar Sportsmen's Club meeting, Willmar Womble
- 3/26 Met with Scharf of MCD re. UMR Watershed, Benson Hubert
- 4/16 Participated in Florida Lakers Protection Ass'n. meeting, Willmar Womble
- 4/16-4/18 Attended Public Relations Workshop, Fargo Hubert
- 4/23 Planted trees on city property with Kiwanis group, Benson Hubert
- 4/25 Presented slide talk to Lakefield Kiwanis, Lakefield Womble
- 5/1 Attended Minn. Conservation Fed. meeting, Marshall Hubert
- 5/6-5/10 Attended Supr. & Group Performance Course, Fargo Hubert
- 5/14-5/15 Attended Northern Prairie Research Center Biological Workshop, Jamestown Womble
- 5/21 Attended Upper Watonwan Watershed meeting, Mountain Lake Hubert
- 6/7 Met w/Hammond re. cover width study, Benson Hubert
- 6/25 Presented Wetland Resource program to Kiwanis, Benson Hubert

- 7/17 Met with County Eng. re. road improvements effecting
WPAs, Jackson Womble
- 7/23 Met with Highway Depart. officials re. road improve-
ments effecting WPAs, Glenwood Womble
- 7/24 Attended Upper Mn. River Watershed meeting, Ortonville
Hubert
- 8/16 Met with Big Stone County group re. weed problems,
Ortonville Hubert and Womble
- 9/4 Met with Big Stone County auditor re. drainage policy,
Ortonville Hubert
- 9/18 Met with Highway Depart. officials re. road improve-
ments, Westport Womble
- 9/26 Toured Sherburne NWR, picked up surplus Jeep
Hubert and Womble
- 9/30 Presented Wetlands Resource program to women's club
at Dokken's, Benson Hubert
- 10/2 Met with GMA Swendson re. law enforcement, Benson
Hubert and Womble
- 10/16 Delivered refuge revenue checks to B.S.. Stevens,
L.Q.P., Traverse and Swift Counties Hubert
- 11/5 Met with Northern Pacific RR agent re. Grote Unit
Water Control, Morris Hubert
- 11/6 Attended Safe Driving Course, Benson
Hubert, Nelson, Schliep
Haukos, Motzko and Womble
- 11/19 Presented Wetlands Resource program to Brocton Lions,
Brocton Hubert
- 12/3 Met with Northern Pacific re. Grote Unit Water
Control, St. Paul Hubert
- 12/6 Attended Lions Club luncheon, Benson
Womble

Regular monthly co-ordination meetings with the Benson
Wetland Acquisition office were attended. Manager Hubert
attended regular luncheons of the Benson Kiwanis and was
elected as the organization's treasurer.

D. Hunting

Hunting use seems to be the main basis for acceptance of
our wetlands program. Hunters are nearly unanimous in
their support. One of the only complaints heard was from
a 5'4" fellow that thought the cover was too tall and
dense!!

Interest and acceptance is spreading quickly along the
lines of non-consumptive use. Photographers, observers,

Good for him!

school groups and others are making greater use of the areas and we are urging this type of use constantly.

The 1968 waterfowl season actually amounted to the opening weekend only. Misty cool weather offered an ideal opener but high hunting pressure evidently helped the birds decide to head south. Other hunting use was considerable as pheasant hunters and archers made regular visits to many units.

Bag checks made by station personnel may be found in Table VIII.

TABLE VIII BAG CHECK SUMMARY

Benson Wetland Management District							
	1966		1967		1968		
Hunters checked	109		74		130		
Coot checked	0		1		1		
Ducks checked	136		121		76		
Average Ducks/Hunter	1.24		1.63		.58		
Ducks Lost-Hunters Asked	13/35		37/48		30/26		
Species	No.	%	No.	%	No.	%	
Mallard	45	33	24	20	17	22	✓
Black	-	-	-	-	3	4	
Gadwall	1	Tr.	1	Tr.	1	Tr.	
Baldpate	9	7	6	5	11	14	
Pintail	7	5	1	Tr.	2	3	
G. W. Teal	18	13	23	19	19	25	✓
B. W. Teal	22	16	48	40	12	16	✓
Shoveller	5	4	4	3	-	-	
Wood Duck	5	4	11	9	6	8	
Redhead	14	10	2	Tr.	1	Tr.	
Ring-neck	5	4	-	-	2	3	
Scaup	5	4	1	Tr.	1	Tr.	
Mergansers	-	-	-	-	1	Tr.	

E. Violations

Game violations appeared to be more prevalent during 1968. Table IX lists five cases processed while warnings were issued for an additional 12 violations. Most warnings involved juveniles. All hunters included in the bag check summary were also checked for legal compliance.

TABLE IX VIOLATION SUMMARY			
Defendant	Charge	Officer	Action
Raymond J. Snyder, Minneapolis	Shooting from car	Hubert	\$25/4
Roger B. Signalness, Starbuck	No lic. or stamp	Womble	\$50/0
Peter J. Rolfzen, Willmar	Improper plug	Womble	\$15/4
Alf. G. Hustoft, Willmar	Unplugged shotgun	Womble	\$20/4
James S. Harris, New Hope	Improper plug	Womble	\$25/0

Sign shooting and snowmobile activity on WPAs continues to be major problems. During 1968, about 50 blue goose signs were defaced. Unfortunately no culprits were caught in the act. Increased snowmobile activity on WPAs this winter is doubtless. The prohibited use of snowmobiles on WPAs has been publicized throughout the District and several warnings have been issued. However, it is evident that stronger action may be required in the future.

F. Safety

Safety meetings were held periodically. Safety literature from the regional office and several films provided topics for discussions. Safety films were obtained from the Minn. Highway Department, Aetna, GMC and the regional office. On November 8th, all members of the management staff participated in the Bureau's defensive driving course.

This station has had no lost-time accidents since its origination. At the close of the year our record stood at 5,173 man days without a lost-time accident.

G. Payments to Counties

TABLE X PAYMENTS TO COUNTIES			
County	1966	1967	1968
Big Stone	\$2,905.95	\$3,477.93	\$4,480.66
Cottonwood	204.54	249.77	616.11
Jackson	807.30	1,023.73	1,547.17
Kandiyohi	2,040.73	3,147.17	3,430.94
Lac qui Parle	16.91	673.11	1,028.84
Pope	1,507.43	2,489.97	2,991.38
Stearns	694.73	963.03	1,240.02
Stevens	1,942.47	2,720.86	2,857.41
Swift	1,123.25	1,490.26	1,536.91
Traverse	988.05	1,193.48	1,264.73
Yellow Medicine	20.27	20.27	80.27
TOTAL	\$12,251.63	\$17,449.58	\$21,074.44

Checks covering payments to counties under the Refuge Revenue Sharing Act were delivered to eleven counties during October. Payments in 1968 and the two preceding years are noted in Table X. Publicity continued to play an important part in check presentations. County Auditors and several County Commissioners were involved in the presentations with the assistance of Area Acquisition personnel. News releases covering these payments in lieu of taxes were furnished to all district news outlets.

Requests have been received from some counties for a breakdown of Federal land holdings by townships. It appears that township officials are pressuring county officials for their fair share of funds. So far Bureau involvement has been avoided due to the difficulty in compiling this sort of material for eleven counties.

VIII. OTHER ITEMS

A. Items of Interest

Considerable time was spent obtaining certificates of inspection and disclaimers for the Division of Realty.

The resource inventory using needle-sort cards was updated. Earl Orr, biology teacher at Benson High School worked on this project for about one month.

Duck stamp sales at the Benson Post Office dropped slightly this year. Stamp prices were \$3.00 throughout all reporting years in the following table.

TABLE XI DUCK STAMP SALES - BENSON, MINN.			
Year	Amount	Year	Amount
1963	283	: 1966	420
1964	293	: 1967	431
1965	330	: 1968	414

Mrs. Evonne Mikkelsen replaced Mrs. Betty Dahl as station clerk. She entered on duty, received a career conditional appointment and was promoted all in the same year.



Wetland Managers Jim Hubert and Jack Womble (L-R)
69, 1, 1-13, JJH



Clerk-typist Mrs. Evonne Mikkelsen
69, 2, 1-8, JJH



Maintenancemen Roger Nelson and Richard Motzko
69, 3, 1-7, JJH



Laborer John Schliep
68, 63, 12-8, JCW



Laborer Dave Haukos
68, 62, 12-28, JCW

A suggestion involving a portable barbed wire winder was submitted by Messrs. Hubert, Metzko and Nelson. An award was not received but the idea is being circularized. One order for a duplicate winder has been received already. Manager Hubert received a \$15 award for his suggestion of a "follow-up green sheet" whereby all bureau employees are informed of personnel changes resulting from the green sheet. The new report is called "Personnel Pointers". The idea and original monetary award was shared with Bob Personius of Horicon NWR.

News releases were issued to district press and radio outlets. Included were articles on building sales, snowmobile prohibition, revenue sharing, sign shooting and availability of wetland maps.

The semi-monthly article "WING TIPS" was originated by Jim Hubert and submitted to area newspapers. The series deals primarily with wildlife and its relationship to cover or the lack of it. Other conservationists in the area occasionally write the article. Subject matter has included, partially, Ice Storms & Habitat, Nesting Cover, Wildlife Week, Gun Control, Purple Martins, Pheasant Seasons, Habitat Studies and Big Stone NWR.



Encroachment continues, such drainage up to our line is apparently legal though it adds silt and problems to the management unit. 68, 10, 5-3, JCW



Historical items occasionally found on units worth saving but funds aren't available for restoration and protection. Wehseler Unit, Stearns Co.
68, 42, 4-24, JJH

43.

Jack Womble, Roger Nelson and Richard Motzko attended bureau law enforcement training at Madison, Wisconsin for one week. Manager Hubert attended the Supervision and Group Performance course sponsored by CSC at Fargo.

Sections I, IV, V and VI of this report were compiled by Jack Womble and Sections II, III, VII and VIII were prepared by Jim Hubert. Credit for typing goes to Evonne Mikkelsen.

20

B. Signature Page

44.

1-31-69
Date

James J. Hubert
James J. Hubert
Project Leader

FEB 4 1969
Date

15/ TCC J. Cullen
Signature (R.O. Approval)

ASST Regional Refugee Supervisor
Title

3-1758
Form No. 8
(Rev. Jan. 1956)

F and Wildlife Service Branch of Wildlife Refuges
CULTIVATED CROPS - HAYING - GRAZING

Refuge Hansen Wetland Management District County Sumner - Ten Counties State Minnesota

Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water- fowl Browsing Crops Type and Kind	Total Acreage
	Acres	Bu./Tons	Harvested Acres	Bu./Tons	Unharvested Acres	Bu./Tons			
<u>Greensland Retirement</u>									
Small Grain/Legume	1,587		0		44		1,631	1,631 - Alf.-Cover*	1,631
<u>Food Plot Rotations</u>									
Corn	152		0		76		228		228
Small Grain/Alf.	203		0		0		203	203 - Alf. -Cover*	203
Alfalfa	0		0		0		0	135 - Alf. -Cover*	135
								Fallow Ag. Land.	0

No. of Permittees: Agricultural Operations 89 Haying Operations 2 Grazing Operations 8

*Includes present year plantings only. **Includes all alf. acres derived from 1968 seeddown & food plot rotations.

***Tenant and previous landowner permitted to take one crop of hay for not plowing permanent cover during reservation period.

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing Number Animals	AUM'S	Cash Revenue	ACREAGE period.
*** Alfalfa		30	0	1. Cattle	138	518.25	1,036.50
				2. Other	0	0	0
				1. Total Refuge Acreage Under Cultivation			2,197 **
				2. Acreage Cultivated as Service Operation			0
Hay - Wild	0						

DIRECTIONS FOR PREPARING FORM NR--8'
CULTIVATED CROPS - HAYING - GRAZING

Report Form NR-8 should be prepared on a calendar-year basis for all crops which were planted during the calendar year and for haying and grazing operations carried on during the same period.

Separate reports shall be furnished for Refuge lands in each county when a refuge is located in more than one county or State.

Cultivated Crops Grown - List all crops planted, grown and harvested on the refuge during the reporting period regardless of purpose. Crops in kind which have been planted by more than one permittee or this Service shall be combined for reporting purposes.

Permittee's Share - Only the number of acres utilized by the permittee for his own benefit should be shown under the Acres column, and only the number of bushels of farm crops harvested by the permittee for himself should be shown under the Bushels Harvested column. Report all crops harvested in bushels or fractions thereof except such crops as silage, watermelons, cotton, tobacco, and hay, which should be reported in tons or fractions thereof.

Government's Share or Return - Harvested Show the acreage and number of bushels harvested for the Government of crops produced by permittees or refuge personnel. Unharvested Show the exact acreage and the estimated number of bushels of grain available for wildlife. If grazing is made available to waterfowl through the planting of grain, cover, green manure, grazing or hay crops, estimate the tonnage of green food produced or utilized and report under Bushels Unharvested column.

Total Acreage Planted - Report all acreage planted, including crop failures.

Green Manure, Cover and Waterfowl Grazing Crops Specify the acreage kind and purpose of the crop. These crops and the acreage may be duplicated under cultivated crops if planted during the year, or a duplication may occur under hay if the crop results from a perennial planting.

Hay - Improved - List separately the kinds of improved hay grown. Annual plantings should also be reported under Cultivated Crops, and perennial hay should be listed in the same manner at time of planting

Total Refuge Acreage Under Cultivation Report total land area devoted to agricultural purposes during the year.

3-1758
Form ~~NR~~ 8
(Rev. Jan. 1956)

F and Wildlife Service Branch of Wildlife Refuges

CULTIVATED CROPS - HAYING - GRAZING

Refuge Benson Wetland Management District County Big Stone State Minnesota

Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water- fowl Browsing Crops Type and Kind	Total Acreage
	Acres	Bu./Tons	Harvested Acres	Bu./Tons	Unharvested Acres	Bu./Tons			
<u>Cropland Retirement</u>									
Small Grain/Legume	299		0		0		299	299 - Alf. - Cover*	299
<u>Feed Plot Rotations</u>									
Corn	48		0		24		72		72
Small Grain/Alfalfa	72		0		0		72	72 - Alf. - Cover*	72
Alfalfa	0		0		0		0	54 - Alf. - Cover*	54
								Fallow Ag. Land.	0

No. of Permittees: Agricultural Operations 19 Haying Operations 0 Grazing Operations 0

* This includes present year plantings only.

** Includes all alf. acres derived from 1968 seeddown and feed plot rotations.

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing Number Animals	AUM'S	Cash Revenue	ACREAGE
0				1. Cattle	0	0	0
				2. Other	0	0	0
				1. Total Refuge Acreage Under Cultivation			497**
Hay - Wild	0			2. Acreage Cultivated as Service Operation			0

DIRECTIONS FOR PREPARING FORM NR--8
CULTIVATED CROPS - HAYING - GRAZING

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Total Acreage Planted - Report all acreage planted, including crop failures.

Green Manure, Cover and Waterfowl Grazing Crops Specify the acreage kind and purpose of the crop. These crops and the acreage may be duplicated under cultivated crops if planted during the year, or a duplication may occur under hay if the crop results from a perennial planting.

Hay - Improved - List separately the kinds of improved hay grown. Annual plantings should also be reported under Cultivated Crops, and perennial hay should be listed in the same manner at time of planting.

Total Refuge Acreage Under Cultivation Report total land area devoted to agricultural purposes during the year.

3-1758
Form WD-8
(Rev. Jan. 1956)

☐ and Wildlife Service ☐ Branch of Wildlife Refuges

CULTIVATED CROPS - HAYING - GRAZING

Refuge Panama Wetland Management District County Cottonwood State Minnesota

Cultivated Crops Grown	Permittee's		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water- fowl Browsing Crops Type and Kind	Total Acreage
	Share Harvested		Harvested		Unharvested				
	Acres	Bu./Tons	Acres	Bu./ Tons	Acres	Bu. /Tons			
Grainland Retirement									
Small Grain/Legume	26		0		0		26	25 - Alf. - Cover*	26
								Fallow Ag. Land.	0

No. of Permittees: Agricultural Operations 1 Haying Operations 0 Grazing Operations 1

* This includes present year plantings only.

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing	Number Animals	AUM'S	Cash Revenue	ACREAGE
0				1. Cattle	24 (calves)	30	60.00	64
				2. Other	0	0	0	0
				1. Total Refuge Acreage Under Cultivation				26
Hay - Wild	0			2. Acreage Cultivated as Service Operation				0

DIRECTIONS FOR PREPARING FORM NR--8
CULTIVATED CROPS - HAYING - GRAZING

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3-1758
Form NR-8
(Rev. Jan. 1956)

F and Wildlife Service Branch of Wildlife Refuges

CULTIVATED CROPS - HAYING - GRAZING

Refuge Benson Wetland Management District County Jackson State Minnesota

Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water- fowl Browsing Crops Type and Kind	Total Acreage
	Acres	Bu./Tons	Harvested		Unharvested				
			Acres	Bu./ Tons	Acres	Bu. /Tons			
<u>Cropland Retirement</u> Small Grain/Legume	32		0		42		74	74 - Alf. - Cover*	74
								Fallow Ag. Land.	0

No. of Permittees: Agricultural Operations 4 Haying Operations 2 Grazing Operations 1

*This includes present year plantings only.

***Tenant and previous landowner permitted to take one crop of hay for not plowing permanent cover during reservations.

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing	Number Animals	AUM'S	Cash Revenue	ACREAGE
***Alfalfa		30	0	1. Cattle	19	80	\$160.00	138
				2. Other	0	0	0	0
1. Total Refuge Acreage Under Cultivation								74 +
2. Acreage Cultivated as Service Operation								0
Hay - Wild	0							

DIRECTIONS FOR PREPARING FORM NR--8'
CULTIVATED CROPS - HAYING - GRAZING

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Total Acreage Planted - Report all acreage planted, including crop failures.

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Total Refuge Acreage Under Cultivation Report total land area devoted to agricultural purposes during the year.

3-1758
Form NR-8
(Rev. Jan. 1956)

F and Wildlife Service Branch of Wildlife Refuges
CULTIVATED CROPS - HAYING - GRAZING

Refuge Benson Wetland Management District County Kandiyohi State Minnesota

Refuge <u>Benson Wetland Management District</u> County									
Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water- fowl Browsing Crops Type and Kind	Total Acreage
	Acres	Bu./Tons	Harvested		Unharvested				
			Acres	Bu./ Tons	Acres	Bu. /Tons			
Grain/Alfalfa									
Small Grain/Logans	316		0		0		316	316 Alf. - Cover*	316
Food Plot Rotations									9
Corn	36		0		18		54		
Small Grain/Alfalfa	27		0		0		27	27 Alf. - Cover*	27
Alfalfa	0		0		0		0	18 Alf. - Cover*	18
								Fallow Ag. Land.	0

No. of Permittees: 15 Agricultural Operations 15 Haying Operations 0 Grazing Operations 2
*This includes present year plantings only. **Includes all alf. acres derived from 1968 seedings & food plot rotations.

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing	Number Animals	AUM'S	Cash Revenue	ACREAGE
0				1. Cattle	31	141.25	282.50	226
				2. Other	0	0	0	0
				1. Total Refuge Acreage Under Cultivation				415 **
				2. Acreage Cultivated as Service Operation				0
Hay - Wild	0							

DIRECTIONS FOR PREPARING FORM NR--8'
CULTIVATED CROPS - HAYING - GRAZING

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Separate reports shall be furnished for Refuge lands in each county when a refuge is located in more than one county or State.

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Government's Share or Return - Harvested Show the acreage and number of bushels harvested for the Government of crops produced by permittees or refuge personnel. Unharvested Show the exact acreage and the estimated number of bushels of grain available for wildlife. If grazing is made available to waterfowl through the planting of grain, cover, green manure, grazing or hay crops, estimate the tonnage of green food produced or utilized and report under Bushels Unharvested column.

Total Acreage Planted - Report all acreage planted, including crop failures.

Green Manure, Cover and Waterfowl Grazing Crops Specify the acreage kind and purpose of the crop. These crops and the acreage may be duplicated under cultivated crops if planted during the year, or a duplication may occur under hay if the crop results from a perennial planting.

Hay - Improved - List separately the kinds of improved hay grown. Annual plantings should also be reported under Cultivated Crops, and perennial hay should be listed in the same manner at time of planting.

Total Refuge Acreage Under Cultivation Report total land area devoted to agricultural purposes during the year.

3-1758
Form ~~NR-8~~
(Rev. ~~Jan.~~ 1956)

F and Wildlife Service Branch of Wildlife Refuges

CULTIVATED CROPS - HAYING - GRAZING

Refuge Benson Wetland Management District County LaSalle State Minnesota

Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water- fowl Browsing Crops Type and Kind	Total Acreage
	Acres	Bu./Tons	Harvested Acres	Bu./Tons	Unharvested Acres	Bu./Tons			
Greenland Retirement Small Grain/Legume	136		0		0		136	136 Alf. - Cover*	136
								Fallow Ag. Land.	0

No. of Permittees: Agricultural Operations 4 Haying Operations 0 Grazing Operations 0

* This includes present year plantings only. **Includes all alf. acres derived from 1968 seeddown & food plot rotation.

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing Number Animals	AUM'S	Cash Revenue	ACREAGE
0				1. Cattle	0	0	0
				2. Other	0	0	0
				1. Total Refuge Acreage Under Cultivation			136 **
Hay - Wild	0			2. Acreage Cultivated as Service Operation			0

DIRECTIONS FOR PREPARING FORM NR--8
CULTIVATED CROPS - HAYING - GRAZING

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Hay - Improved - List separately the kinds of improved hay grown. Annual plantings should also be reported under Cultivated Crops, and perennial hay should be listed in the same manner at time of planting.

Total Refuge Acreage Under Cultivation Report total land area devoted to agricultural purposes during the year.

3-1758
Form ~~NR-8~~
(Rev. ~~Jan.~~ 1956)

F and Wildlife Service anch of Wildlife Refuges

CULTIVATED CROPS - HAYING - GRAZING

Refuge ~~Benson Wetland Management District~~ County ~~Pope~~ State ~~Minnesota~~

Cultivated Crops Grown	Permittee's		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water- fowl Browsing Crops Type and Kind	Total Acreage
	Share	Harvested	Harvested		Unharvested				
			Acres	Bu./ Tons	Acres	Bu. /Tons			
<u>Cropland Retirement</u>									
Small Grain/Legume	222		0		2		224	224 Alf. - Cover*	224
<u>Food Plot Rotations</u>									
Corn	18		0		9		27		27
Small Grain/Alfalfa	27		0		0		27	27 Alf. - Cover*	27
								Fallow Ag. Land.	0

No. of Permittees: Agricultural Operations 17 Haying Operations 0 Grazing Operations 3
*This includes present year plantings only. **Includes all alf. acres derived from 1966 seeddown & food plot rotation.

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing	Number Animals	AUM'S	Cash Revenue	ACREAGE
0				1. Cattle	37	157	\$314.00	274
				2. Other	0	0	0	0
				1. Total Refuge Acreage Under Cultivation				278 **
Hay - Wild	0			2. Acreage Cultivated as Service Operation				0

DIRECTIONS FOR PREPARING FORM NR--8'
CULTIVATED CROPS - HAYING - GRAZING

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Hay - Improved - List separately the kinds of improved hay grown. Annual plantings should also be reported under Cultivated Crops, and perennial hay should be listed in the same manner at time of planting

Total Refuge Acreage Under Cultivation Report total land area devoted to agricultural purposes during the year.

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Form ~~NR-8~~
(Rev. Jan. 1956)

Fish and Wildlife Service Branch of Wildlife Refuges

CULTIVATED CROPS - HAYING - GRAZING

Refuge Benson Wetland Management District County Stearns State Minnesota

Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water-fowl Browsing Crops Type and Kind	Total Acreage
	Acres	Bu./Tons	Harvested Acres	Bu./Tons	Unharvested Acres	Bu./Tons			
Greenland Retirement									
Small Grain/Legume	43		0		0		43	43 - Alf. - Cover*	43
								Fallow Ag. Land.	0

No. of Permittees: Agricultural Operations 4 Haying Operations 0 Grazing Operations 0
*This includes present year plantings only. **Includes all alf. acres derived from 1968 seeddown & food plot rotation.

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing	Number Animals	AUM'S	Cash Revenue	ACREAGE
0				1. Cattle	0	0	0	0
				2. Other	0	0	0	0
				1. Total Refuge Acreage Under Cultivation				43**
Hay - Wild	0			2. Acreage Cultivated as Service Operation				0

DIRECTIONS FOR PREPARING FORM NR--8'
CULTIVATED CROPS - HAYING - GRAZING

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Form NR-8
(Rev. Jan. 1956)

F^o and Wildlife Service Ranch of Wildlife Refuges
CULTIVATED CROPS - HAYING - GRAZING

Refuge Ramsey Wetland Management District County Stevens State Minnesota

Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water- fowl Browsing Crops Type and Kind	Total Acreage
	Acres	Bu./Tons	Harvested Acres	Bu./Tons	Unharvested Acres	Bu./Tons			
<u>Greenland Retirement</u>									
Small Grain/Legume	232		0		0		232	232 Alf. - Cover*	232
<u>Feed Plot Rotations</u>									
Corn	20		0		10		30		30
Small Grain/Alf.	27		0		0		27	27 Alf. - Cover*	27
Alfalfa	0		0		0		0	27 Alf. - Cover*	27
								Fallow Ag. Land.	0

No. of Permittees: Agricultural Operations 14 Haying Operations 0 Grazing Operations 0
*This includes present year plantings only. **Includes all alf. acres derived from 1968 seeddown & feed plot rotations.

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing	Number Animals	AUM'S	Cash Revenue	ACREAGE
0				1. Cattle	0	0	0	0
				2. Other	0	0	0	0
				1. Total Refuge Acreage Under Cultivation				316 **
Hay - Wild	0			2. Acreage Cultivated as Service Operation				0

DIRECTIONS FOR PREPARING FORM NR--8'
CULTIVATED CROPS - HAYING - GRAZING

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3-1758

Form NR-8
(Rev. Jan. 1956)

F and Wildlife Service Branch of Wildlife Refuges

CULTIVATED CROPS - HAYING - GRAZING

Refuge Benson Wetland Management District County Swift State Minnesota

Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water- fowl Browsing Crops Type and Kind	Total Acreage
	Acres	Bu./Tons	Harvested		Unharvested				
			Acres	Bu./ Tons	Acres	Bu. /Tons			
<u>Cropland Retirement</u>									
Small Grain/Legume	6		0		0		6	6 Alf. - Cover*	6
<u>Food Plot Rotations</u>									
Corn	6		0		3		9		9
Small Grain/Alf.	23		0		0		23	23 Alf. - Cover*	23
Alfalfa	0		0		0		0	9 Alf. - Cover*	9
								Fallow Ag. Land.	0

No. of Permittees: Agricultural Operations 3 Haying Operations 0 Grazing Operations 1
 *This includes present year plantings only. **Includes all alf. acres derived from 1960 seeddown & food plot rotations.

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing	Number Animals	AUM'S	Cash Revenue	ACREAGE
0				1. Cattle	27	110	\$220.00	176
				2. Other	0	0	0	0
				1. Total Refuge Acreage Under Cultivation				47 **
Hay - Wild	0			2. Acreage Cultivated as Service Operation				0

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3-1758

Form ~~NR-8~~
(Rev. Jan. 1956)

F and Wildlife Service Branch of Wildlife Refuges

CULTIVATED CROPS - HAYING - GRAZING

Refuge Benson Wetland Management District County Traverse State Minnesota

Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water- fowl Browsing Crops Type and Kind	Total Acreage
	Acres	Bu./Tons	Harvested Acres	Bu./Tons	Unharvested Acres	Bu./Tons			
<u>Cropland Retirement</u>									
Small Grain/Legume	275		0		0		275	275 Alf. - Cover*	275
<u>Feed Plot Rotations</u>									
Corn	24		0		12		36		36
Small Grain/Alf.	27		0		0		27	27 Alf. - Cover*	27
Alfalfa	0		0		0		0	27 Alf. - Cover*	27
								Fallow Ag. Land.	0

No. of Permittees: Agricultural Operations 8 Haying Operations 0 Grazing Operations 0

*This includes present year plantings or **Includes all alf. acres derived from 1968 seeddown & feed plot rotations.

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing	Number Animals	AUM'S	Cash Revenue	ACREAGE
0				1. Cattle	0	0	0	0
				2. Other	0	0	0	0
				1. Total Refuge Acreage Under Cultivation				365 **
Hay - Wild	0			2. Acreage Cultivated as Service Operation				0

DIRECTIONS FOR PREPARING FORM NR--8
CULTIVATED CROPS - HAYING - GRAZING

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Total Refuge Acreage Under Cultivation Report total land area devoted to agricultural purposes during the year.

3-1979 (NR-12)
(9/63)

Bureau of Sport Fisheries and Wildlife

ANNUAL REPORT OF PERSTICIDE APPLICATION

Refuge

Benson Wetland Management District

Proposal Number

Reporting Year

1,2,3

1968

INSTRUCTIONS: Wildlife Refuges Manual, secs. 3252d, 3394b and 3395.

Date(s) of Application	List of Target Pest(s)	Location of Area Treated	Total Acres Treated	Chemical(s) Used	Amount Payable Cost Amount	Application Rate	Carrier and Rate	Method of Application
(1)	(2)	Unit (3) County	(4)	(5)	(6)	(7)	(8)	(9)
June	Canada Thistle	Stern - Jackson	106	2-4,D L.V.Ester	Deel - 185.50	4#/Acre	Water	Air
June	Canada Thistle	Sevetson - Jackson	45	2-4,D L.V.Ester	Deel - 78.75	4#/Acre	Water	Air
June	Canada Thistle	Sangl - Jackson	60	2-4,D L.V.Ester	Deel - 105.00	4#/Acre	Water	Air
June	Canada Thistle	Weibener - Jackson	42	2-4,D L.V.Ester	Deel - 73.50	4#/Acre	Water	Air
June	Canada Thistle	Rasmussen - Jackson	7	2-4,D L.V.Ester	Rasm. - 15.00	4#/Acre	Water	Tractor
June	Leafy Spurge	Thompson - Big Stone	1	Tordon	Tate - 4.00	2#/Acre	Water	Hand
July	Leafy Spurge	Lynch L. - Swift	4	Tordon	Flaten - 68.73	2#/Acre	Water	Tractor
July	Thistles	Freeman - Stevens	15	2-4,D L.V.Ester	Graff - 22.50	4#/Acre	Water	Tractor
July	Sow & Can. Thistle	Welker, Hoffman, Dismal Olson, Jorg, Art & Lempr. - Swift & B.S.	93	2-4,D L.V.Ester	Nohl - 186.00	4#/Acre	Water	Air
July	Sow & Can. Thistle	Schw, Ninneman - Jack.	12	2-4,D L.V.Ester	Deel - 21.00	4#/Acre	Water	Air
July	Sow & Can. Thistle	Eak, Eak - Cottonwood	34	2-4,D L.V.Ester	Deel - 59.50	4#/Acre	Water	Air
July	Sow & Can. Thistle	Schu, DeGr, Rey, Shimek Flann, Fischer, Hodak - Kandiyohi	173	2-4,D L.V.Ester	Deel - 302.75	4#/Acre	Water	Air
July	Sow & Can. Thistle	Kerna, Costello - Stear.	39	2-4,D L.V.Ester	Deel - 68.25	4#/Acre	Water	Air
July	Sow & Can. Thistle	Fredburg, Frosh - Pope	118	2-4,D L.V.Ester	Deel - 206.50	4#/Acre	Water	Air
July	Sow & Can. Thistle	Barry, Lind. L., Swenson - Big Stone	4	2-4,D L.V.Ester	Force Account	4#/Acre	Water	Hand
July	Sow & Can. Thistle	Swenson - Swift	2	2-4,D L.V.Ester	Force Account	4#/Acre	Water	Hand
July	Sow & Can. Thistle	Greiner - Pope	1	2-4,D L.V.Ester	Force Account	4#/Acre	Water	Hand

10. Summary of results (continue on reverse side, if necessary)